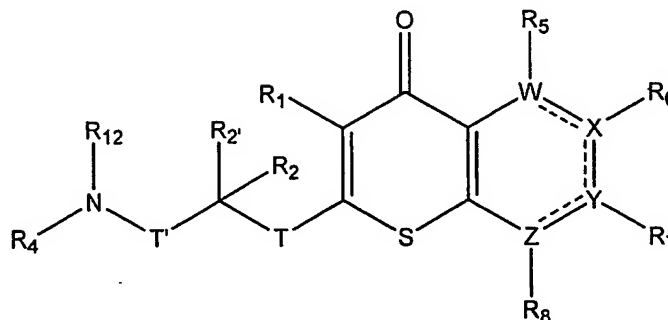


*What is claimed is:*

1. A compound selected from the group represented by Formula I:



Formula I

wherein:

W, X, Y, and Z are independently N, C, CH, O, or S; and Z is optionally absent, provided that:

no more than two of W, X, Y, and Z is -N=, and

W, X, or Y can be O or S only when Z is absent;

the dashed lines in the structure depict optional double bonds;

T and T' are independently a covalent bond, -C(O)-, or optionally substituted lower alkylene;

R<sub>1</sub> is chosen from hydrogen, optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, and optionally substituted heteroaralkyl;

R<sub>2</sub> and R<sub>2'</sub> are independently chosen from hydrogen, optionally substituted alkyl, optionally substituted alkoxy, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, and optionally substituted heteroaralkyl; or R<sub>2</sub> and R<sub>2'</sub> taken together form an optionally substituted 3- to 7-membered ring;

R<sub>12</sub> is chosen from hydrogen, optionally substituted alkyl-, optionally substituted aryl-, optionally substituted aralkyl-, optionally substituted heteroaryl-, optionally substituted heteroaralkyl-, -C(O)-R<sub>3</sub>, and -S(O)<sub>2</sub>-R<sub>3a</sub>;

R<sub>3</sub> is chosen from hydrogen, optionally substituted alkyl-, optionally substituted aryl-, optionally substituted aralkyl-, optionally substituted heteroaryl-, optionally substituted heteroaralkyl-, R<sub>15</sub>O- and R<sub>17</sub>-NH-;

R<sub>3a</sub> is chosen from optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, optionally substituted heteroaralkyl, and R<sub>15</sub>-NH-;

R<sub>4</sub> is chosen from hydrogen, optionally substituted alkyl-, optionally substituted aryl-, optionally substituted aralkyl-, optionally substituted heteroaralkyl-, and optionally substituted heterocyclyl-;

or R<sub>4</sub> taken together with R<sub>12</sub>, and the nitrogen to which they are bound, form an optionally substituted 5- to 12-membered nitrogen-containing heterocycle, which optionally incorporates from one to two additional heteroatoms, selected from N, O, and S in the heterocycle ring;

or R<sub>4</sub> taken together with R<sub>2</sub> form an optionally substituted 5- to 12-membered nitrogen-containing heterocycle, which optionally incorporates from one to two additional heteroatoms, selected from N, O, and S in the heterocycle ring;

R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub> and R<sub>8</sub> are independently chosen from hydrogen, acyl, optionally substituted alkyl-, optionally substituted alkoxy, halogen, hydroxyl, nitro, cyano, optionally substituted amino, alkylsulfonyl-, alkylsulfonamido-, alkylthio-, carboxyalkyl-, aminocarbonyl-, optionally substituted aryl and optionally substituted heteroaryl-, provided that R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub> and R<sub>8</sub> is absent where W, X, Y, or Z, respectively, is -N=, O, S or absent;

R<sub>15</sub> is chosen from optionally substituted alkyl-, optionally substituted aryl-, optionally substituted aralkyl-, optionally substituted heteroaryl-, and optionally substituted heteroaralkyl-; and

R<sub>17</sub> is hydrogen, optionally substituted alkyl-, optionally substituted aryl-, optionally substituted aralkyl-, optionally substituted heteroaryl-, or optionally substituted hetero-aralkyl-,

or a pharmaceutically acceptable salt or solvate thereof.

2. The compound of Claim 1 comprising one or more of the following:  
one or both of T and T' is a covalent bond;

W, X, Y and Z are independently  $-C=$  or  $-N=$ ;

$R_1$  is hydrogen, optionally substituted  $C_1-C_4$  alkyl, optionally substituted phenyl- $C_1-C_4$ -alkyl-, optionally substituted heteroaryl-  $C_1-C_4$ -alkyl-, optionally substituted naphthalenylmethyl, optionally substituted phenyl, or naphthyl;

$R_2$  is optionally substituted  $C_1-C_4$  alkyl;

$R_2'$  is hydrogen;

$R_{12}$  is  $-C(O)R_3$ ;

$R_3$  is selected from optionally substituted  $C_1-C_8$  alkyl, optionally substituted aryl- $C_1-C_4$ -alkyl-, optionally substituted heteroaryl- $C_1-C_4$ -alkyl-, optionally substituted heteroaryl, optionally substituted aryl,  $R_{15}O-$  and  $R_{17}NH-$ ;

$R_{15}$  is chosen from optionally substituted  $C_1-C_8$  alkyl and optionally substituted aryl. ;

$R_{17}$  is chosen from hydrogen,  $C_1-C_4$  alkyl; cyclohexyl; phenyl; and phenyl substituted with halo,  $C_1-C_4$  alkyl,  $C_1-C_4$  alkoxy, or  $C_1-C_4$  alkylthio;

$R_4$  is chosen from hydrogen,  $C_1-C_4$  alkyl; cyclohexyl; phenyl substituted with hydroxyl,  $C_1-C_4$  alkoxy or  $C_1-C_4$  alkyl; benzyl; heteroarylmethyl-; heteroarylethyl-; heteroarylpropyl-; and  $R_{16}$ -alkylene-;

$R_{16}$  is hydroxyl, di( $C_1-C_4$  alkyl)amino-, ( $C_1-C_4$  alkyl)amino-, amino,  $C_1-C_4$  alkoxy-, or N-heterocyclyl-, particularly pyrrolidino, piperidino or imidazolyl.; and

$R_5$ ,  $R_6$ ,  $R_7$  and  $R_8$  are independently methoxy, hydrogen, cyano, or halo, provided that  $R_5$ ,  $R_6$ ,  $R_7$  and  $R_8$  is absent where W, X, Y, or Z, respectively, is  $-N=$ .

3. The compound of Claim 2 comprising one or more of the following:

both T and T' are covalent bonds;

W, X, Y and Z are C;

$R_1$  is optionally substituted phenyl- $C_1-C_4$ -alkyl- or optionally substituted heteroaryl- $C_1-C_4$ -alkyl-.

$R_2$  is ethyl or propyl;

R<sub>3</sub> is optionally substituted C<sub>1</sub>-C<sub>8</sub> alkyl, optionally substituted heteroaryl, or optionally substituted aryl;

R<sub>4</sub> is R<sub>16</sub>-alkylene-;

R<sub>16</sub> is amino, C<sub>1</sub>-C<sub>4</sub> alkylamino-, di(C<sub>1</sub>-C<sub>4</sub> alkyl)amino-, C<sub>1</sub>-C<sub>4</sub> alkoxy-, hydroxyl, or N-heterocyclyl;

R<sub>5</sub> is amino, alkylamino, trifluoromethyl, hydrogen or halo;

R<sub>6</sub> is hydrogen, alkyl, or halo;

R<sub>7</sub> is hydrogen, halo, alkyl, alkoxy, cyano, or trifluoromethyl; and

R<sub>8</sub> is hydrogen or halo.

4. The compound of Claim 3 comprising one or more of the following:

R<sub>1</sub> is naphthyl, phenyl, bromophenyl, chlorophenyl, methoxyphenyl, ethoxyphenyl, tolyl, dimethylphenyl, chlorofluorophenyl, methylchlorophenyl, ethylphenyl, phenethyl, benzyl, chlorobenzyl, methylbenzyl, methoxybenzyl, cyanobenzyl, hydroxybenzyl, dichlorobenzyl, dimethoxybenzyl, or naphthalenylmethyl;

R<sub>2</sub> is *i*-propyl;

R<sub>3</sub> is tolyl, halophenyl, halomethylphenyl, hydroxymethylphenyl, methylenedioxyphenyl, formylphenyl or cyanophenyl;

R<sub>4</sub> is R<sub>16</sub>-alkylene-;

R<sub>16</sub> is amino;

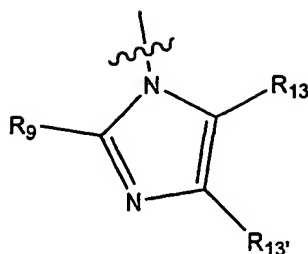
R<sub>5</sub>, R<sub>6</sub>, and R<sub>8</sub> are hydrogen; and

R<sub>7</sub> is cyano, methoxy or halogen.

5. The compound of claim 4 wherein R<sub>1</sub> is benzyl, cyanobenzyl, methoxybenzyl, or naphthalenylmethyl.

6. The compound of claim 5 wherein R<sub>1</sub> is benzyl.

7. The compound of claim 1, wherein R<sub>4</sub> taken together with R<sub>12</sub> and the nitrogen to which they are bound, forms an optionally substituted imidazolinyl ring of the formula:



wherein

R<sub>9</sub> is chosen from hydrogen, optionally substituted C<sub>1</sub>-C<sub>8</sub> alkyl, optionally substituted aryl, optionally substituted aryl-C<sub>1</sub>-C<sub>4</sub>-alkyl -, optionally substituted heteroaryl-C<sub>1</sub>-C<sub>4</sub>-alkyl -, optionally substituted aryl-C<sub>1</sub>-C<sub>4</sub>-alkoxy -, optionally substituted heteroaryl-C<sub>1</sub>-C<sub>4</sub>-alkoxy -, optionally substituted heteroaryl-; and

R<sub>13</sub> and R<sub>13'</sub> are independently hydrogen, optionally substituted C<sub>1</sub>-C<sub>8</sub> alkyl, optionally substituted aryl, or optionally substituted aryl-C<sub>1</sub>-C<sub>4</sub>-alkyl - (especially optionally substituted alkyl).

8. The compound of claim 7 comprising one or more of the following:

R<sub>9</sub> is phenyl substituted with C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy-, and/or halo; phenyl; or benzyl;

R<sub>13</sub> is hydrogen; and

R<sub>13'</sub> is substituted C<sub>1</sub>-C<sub>4</sub> alkyl.

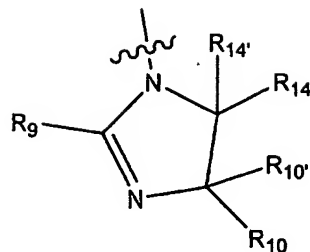
9. The compound of claim 8 comprising one or more of the following:

R<sub>9</sub> is tolyl; halophenyl; or halomethylphenyl;

R<sub>13</sub> is hydrogen; and

R<sub>13'</sub> is aminomethyl, aminoethyl, aminopropyl, acetylamino-methyl, acetylaminoethyl, benzyloxycarbonylamino-methyl or benzyloxycarbonylamino-ethyl.

10. The compound of claim 1 wherein R<sub>12</sub> taken together with R<sub>4</sub> forms an optionally substituted imidazoliny ring of the formula:



wherein

$R_9$  is chosen from hydrogen, optionally substituted  $C_1$ - $C_8$  alkyl, optionally substituted aryl, optionally substituted aryl- $C_1$ - $C_4$ -alkyl -, and optionally substituted heteroaryl-; and

$R_{10}$ ,  $R_{10'}$ ,  $R_{14}$ , and  $R_{14'}$  are independently chosen from hydrogen, optionally substituted  $C_1$ - $C_8$  alkyl, optionally substituted aryl, and optionally substituted aryl- $C_1$ - $C_4$ -alkyl -.

11. The compound of claim 10 comprising one or more of the following:  
 $R_9$  is methylenedioxyphenyl; phenyl; phenyl substituted with  $C_1$ - $C_4$  alkyl,  $C_1$ - $C_4$  alkoxy, and/or halo; or benzyl; and  
 $R_{10}$ ,  $R_{10'}$ ,  $R_{14}$ , and  $R_{14'}$  are independently hydrogen or optionally substituted alkyl.
12. The compound of claim 11 comprising one or more of the following:  
 $R_9$  is methylenedioxyphenyl-; phenyl; or phenyl substituted with methoxy, halo and/or methyl;  
 $R_{10}$  and  $R_{10'}$  are independently selected from the group consisting of hydrogen or optionally substituted  $C_1$ - $C_4$  alkyl; and  
 $R_{14}$  and  $R_{14'}$  are hydrogen.
13. The compound of any of the above claims wherein the stereogenic center to which  $R_2$  and  $R_{2'}$  are attached is of the R configuration.
14. A pharmaceutical formulation comprising a pharmaceutically acceptable excipient and an effective amount of a compound of any of Claims 1-12.

15. A method of treatment comprising administering an effective amount of a compound of any of Claims 1-12 to a patient suffering from a cellular proliferative disease.
16. The method of Claim 15 wherein the cellular proliferative disease is cancer, hyperplasia, restenosis, cardiac hypertrophy, an immune disorder or inflammation.
17. A method of treatment for a cellular proliferative disease comprising administering to a patient suffering therefrom a compound of Claim 1 in an amount sufficient to modulate KSP kinesin activity in cells affected with the disease.
18. A kit comprising a compound of any of Claims 1-12 and a package insert or other labeling including directions for treating a cellular proliferative disease by administering an effective amount of said compound.